Active Calreticulin (CALR)

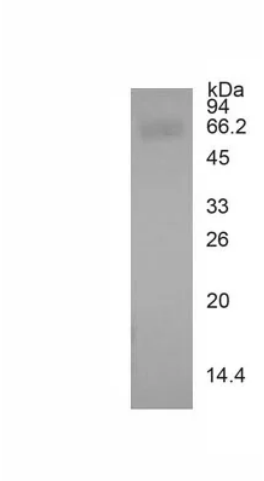
Catalog#:PHH12680

概述（Summary）

别称（Alternative Names）	CRT; RO; SSA; CC1qR; ERp60; HACBP; grp60; CRTC; CRP55; Calregulin; Sicca Syndrome Antigen A; Autoantigen Ro; Endoplasmic reticulum resident protein 60
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Glu18-Leu417】
Accession #	P27797
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	48.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Calcium-binding chaperone that promotes folding, oligomeric assembly and quality control in the endoplasmic reticulum (ER) via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export. Involved in maternal gene expression regulation. May participate in oocyte maturation via the regulation of calcium homeostasis. Present in the cortical granules of non-activated oocytes, is exocytosed during the cortical reaction in response to oocyte activation and

might participate in the block to polyspermy.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

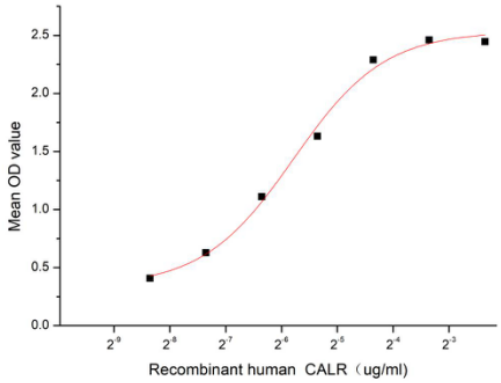


Figure 1. The binding activity of recombinant human CALR and recombinant rat THBS1

Calreticulin (CALR) is an endoplasmic reticulum (ER)-resident protein involved in a spectrum of cellular processes. In healthy cells, CALR operates as a chaperone and Ca2 buffer to assist correct protein folding within the ER. Calreticulin is also found in the nucleus, suggesting that it may have a role in transcription regulation. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin. Recurrent mutations in calreticulin have been linked to various neoplasms, including the myeloproliferative type. Adhesive glycoprotein THBS1 has been shown to play roles in platelet aggregation, angiogenesis and tumorigenesis, the protein is an interactor of CALR, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CALR and recombinant rat THBS1. Briefly, biotin-linked CALR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to THBS1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of CALR andTHBS1 was shown in Figure 1, the EC50 for this effect is 0.018 ug/mL.

注意事项（Note）

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